UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,939,526 B2
APPLICATION NO. : 10/596117
DATED : May 10, 2011
INVENTOR(S) : Matt R Radmer et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

List of References

- **Page 1, Col. 2 (Other Publications), Lines 4-6** - After "1983." delete "Brennan at al., "Automated Bioassay of Interferons in Micro-test Plates.", Biotechniques, Jun./Jul., 78, 1983." and insert the same on First Page, Col. 2, Line 5, as a new entry.

- **Page 1, Col. 2(Other Publications), Line 4** - Delete "at al." and insert -- et al. --, therefor.

- **Page 2, Col. 1(Other Publications), Line 4** - Delete "Rice et al." and insert -- Coleman, et al. --, therefor.

Specification

- **Col. 5, Line 7** - Delete "–$(O)_2$–;" and insert -- –$S(O)_2$–; --, therefor.

- **Col. 7, Line 63** - Delete "–$(O)_2$–;" and insert -- –$S(O)_2$–; --, therefor.

- **Col. 13, Line 42** - Delete "alynyl," and insert -- alkynyl, --, therefor.

- **Col. 21, Line 15** - Delete "–$(O)_2$–;" and insert -- –$S(O)_2$–; --, therefor.

- **Col. 25, Line 8** - Before "alkoxy," delete "to".

- **Col. 29, Line 9** - Delete "allyl," and insert -- alkyl, -- therefor.

- **Col. 29, Line 41** - Delete "–$(O)_2$–;" and insert -- –$S(O)_2$–; --, therefor.

- **Col. 29, Line 62** - Delete "C_{1-10}" and insert -- C_{4-10} --, therefor.

Signed and Sealed this
Thirteenth Day of March, 2012

David J. Kappos

David J. Kappos
Director of the United States Patent and Trademark Office

Specification Cont'd

- **Col. 30, Line 13** - Below "consisting of:" insert -- –(O)–; --.
- **Col. 31, Line 21** - Delete "substitutent." and insert -- substituent. --, therefor.
- **Col. 35, Line 67** - After "of" insert -- –(O)–, --.
- **Col. 36, Line 67** - Delete "oxo.-" and insert -- oxo. --, therefor.
- **Col. 37, Line 39** - After "Ia," insert -- II, --.
- **Col. 38, Line 55** - Delete "VI." and insert -- VIII. --, therefor.
- **Col. 39, Line 8** - Delete "L" and insert -- I, --, therefor.
- **Col. 39, Line 16 to Col. 40 Line 9** - Delete "In step (4b) an N-oxide of Formula IX is aminated to provide a 1*H*-imidazo[4,5-*c*]quinolin-4-amine of Formula IIa-l, which is a subgenus of Formula I, Ia, II, IIa, and IIb. The reaction is carried out in two parts. In part (i) a compound of Formula IX is reacted with an acylating agent. Suitable acylating agents include alkyl- or arylsulfonyl chorides (e.g., benesulfonyl chloride). In part (ii) the product of part (i) is reacted with an excess of an aminating agent. Suitable animenzenesulfonyl choride, methanesulfonyl choride, or p-toluating agents include ammonia (e.g. in the form of ammonium hydroxide) and ammonium salts (e.g., ammonium carenesulfonyl chloride). In part (ii) the product of part (i) is reacted with an excess of an aminating agent. Suitable animbonate, ammonium bicarbonate, ammonium phosphate). The reaction can be carried out by dissolving a compound of Formula IX in a suitable solvent such as dichloromethane or chlorofonn, adding ammonium hydroxide to the solution, and then adding p-toluenesulfonyl chloride. The product or a pharmaceutically acceptable salt thereof can be isolated using conventional methods."

  and insert -- In step (4b) an N-oxide of Formula IX is aminated to provide a 1*H*-imidazo[4,5-*c*]quinolin-4-amine of Formula IIa-1, which is a subgenus of Formulas I, Ia, II, IIa, and IIb. The reaction is carried out in two parts. In part (i) a compound of Formula IX is reacted with an acylating agent. Suitable acylating agents include alkyl- or arylsulfonyl chlorides (e.g., benzenesulfonyl chloride, methanesulfonyl chloride, or *p*-toluenesulfonyl chloride). In part (ii) the product of part (i) is reacted with an excess of an aminating agent. Suitable aminating agents include ammonia (e.g. in the form of ammonium hydroxide) and ammonium salts (e.g., ammonium carbonate, ammonium bicarbonate, ammonium phosphate). The reaction can be carried out by dissolving a compound of Formula IX in a suitable solvent such as dichloromethane or chloroform, adding ammonium hydroxide to the solution, and then adding *p*-toluenesulfonyl chloride. The product or a pharmaceutically acceptable salt thereof can be isolated using conventional methods. --, therefor.
- **Col. 41, Line 1** - Delete "4 amines" and insert -- 4-amines --, therefor.

Specification Cont'd

- **Col. 42, Line 63** - Delete "substitutents." and insert -- substituents. --, therefor.
- **Col. 44, Line 11** - Delete "hydroxpropoxy" and insert -- hydroxypropoxy --, therefor.
- **Col. 44, Line 29** - Delete "XXI." and insert -- XXII. --, therefor.
- **Col. 44, Line 48** - Delete "XXV" and insert -- XXIV --, therefor.
- **Col. 51, Line 10** - Delete "VII" and insert -- I --, therefor.
- **Col. 55, Line 32** - Delete "papillomavirises," and insert -- papillomaviruses, --, therefor.
- **Col. 55, Line 58** - Delete "myelogeous" and insert -- myelogenous --, therefor.
- **Col. 55, Line 67** - Delete "greata;" and insert -- areata; --, therefor.
- **Col. 56, Line 18** - Delete "hemophilus" and insert -- haemophilus --, therefor.
- **Col. 59, Line 39** - Delete "(72 μL)." and insert -- (72 mL). --, therefor.
- **Col. 59, Lines 61** - Delete "(50 ml)," and insert -- (50 mL), --, therefor.
- **Col. 61, Line 8** - Delete "S. 0.25" and insert -- S.0.25 --, therefor.
- **Col. 63, Line 3** - Delete "$(M+1)^+$;" and insert -- $(M+H)^+$ --, therefor.
- **Col. 66, Line 4** - Delete "60%" and insert-- ~60% --, therefor.
- **Col. 68, Line 13** - Delete "(M+" and insert -- $(M+H)^+$; --, therefor.
- **Col. 70, Line 56** - Delete "[(3-nitroquinolinyl)" and insert -- [(3-nitroquinolin-4-yl) --, therefor.
- **Col. 73, Line 34** - After "13.39" insert -- . --.
- **Col. 75, Lines 28-35** - Delete "mp 150.0-151.0° C. ^{1}H NMR (300 MHz, DMSO) δ 8.72 (d, J=4.7 Hz, 1H), 8.13 (t, J=7.8 Hz, 1H), 7.97-8.01 (m, 2H), 7.71-7.73 (m, 1H), 7.58 (d, J=7.3 Hz, 1H), 7.37 (t, J=8.2 Hz, 1H), 7.17 (t, J=7.0 Hz, 1H), 6.38 (s, 2H), 4.67 (t, J=5.2 Hz, 2H), 3.76 (t, J=5.2 Hz, 2H), 3.28-3.38 (m, 4H), 2.86 (t, J=7.6 Hz, 2H), 1.82 (apparent hextet, J=7.6, 7.4, 7.3 Hz, 2H), 1.69-1.71 (m, 2H), 0.99 (t, J=7.4 Hz, 3H); MS (APCI) m/z 454 $(M+H)^+$; Anal. calcd for $C_{23}H_{27}N_5O_3S$: C, 60.91; H, 6.00; N, 15.44. Found: C, 60.59; H, 5.91; N, 15.32." and insert the same on Col. 75, Line 27, after "powder," as the continuation of the same paragraph.

Specification Cont'd

- **Col. 75, Line 61** - Delete "3.5g" and insert -- ~3.5g --, therefor.
- **Col. 76, Line 9** - Delete "[3-(ethylsulfinyl)" and insert -- [3-(Methylsulfinyl) --, therefor.
- **Col. 76, Line 43** - Delete "pentet," and insert -- (pentet, --, therefor.
- **Col. 83, Line 46** - Delete "(M+H);" and insert -- $(M+H)^+$; --, therefor.
- **Col. 84, Lines 34** - Delete "quinolin amine" and insert -- quinolin-4-amine --, therefor.
- **Col. 91, Line 63** - Delete "3.60," and insert -- 3.60 --, therefor.
- **Col. 91, Line 67** - Delete "(M+H);" and insert -- $(M+H)^+$; --, therefor.
- **Col. 92, Line 29** - After "Russ." delete "i".
- **Col. 100, Line 23** - Delete "41~48" and insert -- 41-48 --, therefor.
- **Col. 101, Line 2** - Delete "Examples" and insert -- The examples --, therefor.
- **Col. 101, Lines 56-60** - Delete "methyethyl" and insert -- methylethyl --, therefor.
- **Col. 102, Lines 23-28** - Delete "methyethyl" and insert -- methylethyl --, therefor.
- **Col. 102, Lines 42-47** - Delete "methyethyl" and insert -- methylethyl --, therefor.
- **Col. 102, Lines 62-66** - Delete "methyethyl" and insert -- methylethyl --, therefor.